## GU601A Controller Brief Introduction

Summarization:

GU601A is an auto control and protection module of generator. The control modes of manual or auto are selectable by keys on panel. Manual starts or stops Genset under manual mode by keys on panel. Auto starts or stops Genset under auto mode by input remote on-off signal. The module is adopted LCD, which displays running status and operating parameters of generator. The main characteristics as following:

- I The core adopts MPU.
- I Flexible configure running protection parameters by press keys and LED on panel.
- I Measuring display parameters, such as frequency and voltage of generator, battery voltage, and fuel pressure, water temp and running time of engine.
- I The type of fuel gate on engine can be set by procedure.
- I Has five relays control output, others can be defined by user except fixed output of fuel gate and control start.
- 5 channels for DI, all can be defined by user.
- I Kinds of fuel pressure and temperature sensors are put inside for user choice.
- I Inner communication interface, can process parameters setting through PC.
- I All connections are connected by pin-like and locked up terminal, easier and more convenient to connect, move, maintain and replace the device.

# Parameters are Displaied and Detected by Modules:

- I The AC phase voltage of generator V
- I Generator frequency HZ
- I Battery voltage Vdc
- I Engine running time Hour
- I Engine coolant temperature ℃ (signal from engine coolant temperature sensor)
- I Engine oil pressure Kpa (signal from engine oil pressure sensor)

All parameters can be displaied by LCD, each screen displays one parameter in 4 digital, can display all parameters one by one by adopting an autocycle mode.

#### Stop Failure and Alarm Protection:

- I Low oil pressure failure
- I High water temperature failure
- I Over speed failure
- I Start fail
- I Emergency stop
- I High/low voltage of generator
- I Charge fail
- Low battery voltage
- Aux. shutdown failure
- I Aux. alarm

#### Settable Running Parameters:

The mode of delivery valve (0 N.C. / 1 N.O.) Mains low voltage alarm value (AC45~300V) 0 (no set) Mains high voltage alarm value (AC45~300V) 0 (no set) Start delay (0~300S) Crank attempt (1~10) Crank time (0~300S) The barring speed of disconnection (0~9999RPM) Idle delay (0~9999S) Preheat delay (0~9999S) Cooling time (0~600S) Stop fail delay (0~60S) The mode of oil pressure sensor (1~9) The mode of coolant temperature sensor (1~9) Safety-on delay time (0~600 s) Over speed failure value (0~9999RPM) 9999 (no set) High water temper warning value (70~160°C) Low oil pressure warning value (50~300Kpa) High water temperature failure value (70~160°C) Low oil pressure failure value (50~300 Kpa) Low battery alarm (1~25V) 0 (no set)

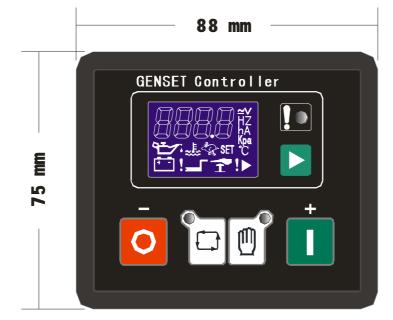
#### Other Parameters:

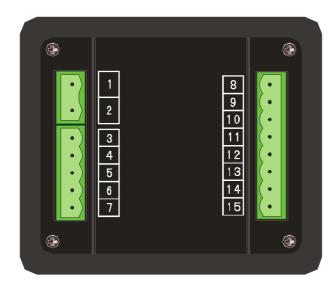
DC working power source voltage: 12V/24V(6.5~35V continued) AC input voltage: phase voltage10~300 Vac RMS (AC frequency  $\geq$ 40 HZ) AC input frequency:  $3\sim$ 70HZ(voltage  $\geq$ 10V) The maximum power consumption:  $\leq$ 3W Class: 1% Startup relay output: 3A/30VDCOperating relay output: 3A/30VDCAux. controller output: 3A/30VDCAux. controller output: 3A/30VDCThe grade of protection: IP65 (for controller front under correctly mounting) Running ambient temperature:  $-20\sim70^{\circ}C$ Storage ambient temperature:  $-40\sim80^{\circ}C$ 

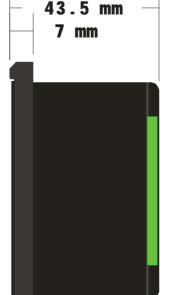
Harsen<sup>тм</sup>

### **GU601A Controller Brief Introduction Outline Dimensional Drawing:**

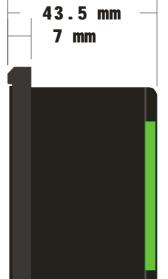
Operation Panel	W88mm×H75mm
Install Hatch	W78mm×H65mm
Thickness	D43.5mm (unconnected)











GU601A Controller Brief Introduction Typical Wiring Diagram:

